Draft Program Timberland Environmental Impact Report for the Meadow Vista Vegetation Management Project

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Summary

1. PROJECT DESCRIPTION

In 1996, the Placer County Board of Supervisors adopted the Meadow Vista Community Plan; the plan establishes a policy framework for long-term community growth including policies to reduce the hazards of wildland fire through fuel reduction measures. Prominent policy direction is a desire to perpetuate the existing forested condition while recognizing that the area has significant fire dangers that must be addressed.

The purpose of the Meadow Vista Vegetation Management Project is to facilitate the implementation of a system of shaded fuelbreaks, defensible space, and defensible landscape practices in keeping with objectives of the Meadow Vista Community Plan utilizing the Program Timberland Environmental Impact Report (PTEIR) process as adopted by the California Board of Forestry. The PTEIR is tiered to the Meadow Vista Community Plan Final EIR, which is incorporated by reference. This PTEIR is also consistent with the California Fire Plan prepared by the State Board of Forestry and implemented by the Nevada-Yuba-Placer Ranger Unit of the California Department of Forestry and Fire Protection.

Managing existing vegetation under this PTEIR may involve to some degree the commercial harvesting of trees, whether to remove dead or dying trees, trees posing a fire hazard, or those suffering from insect/disease problems. The California Department of Forestry and Fire Protection (CDF) regulates commercial timber harvesting on private lands in California as well as providing rural fire protection and enforcing defensible space vegetation standards around buildings.

The PTEIR also discusses the potential impacts of the Meadow Vista portions of the "Proposition 204 Coordinated American River Watershed Health Improvement and Monitoring Project." This \$1,000,000 grant given to the American River Watershed Group will be used to construct fuel breaks, inspect residences for defensible space, and provide public education programs. The impacts of the latter program are closely related to those that would result from the overall vegetation management program proposed in this PTEIR.

Mitigation measures in this document are based on current standard State forest practice rules and new measures with higher standards developed specifically for the Meadow Vista area.

2. LAND USE AND PLANNING

The Meadow Vista Community Plan (MVCP) contains several policies that relate to and support vegetation management. The Vegetation Management Project is an implementation strategy for community plan policy. Without the Vegetation

Management Project, fuel load reduction in the form of shaded fuelbreaks, defensible space, and healthy forest practices will still occur but at a slower rate. The Meadow Vista Vegetation Management Project is consistent with existing county and community plans. No impact to land use planning policy is anticipated.

3. GEOLOGY AND SOILS

Implementation of the project could result in increased short- and long-term erosion from activities. This impact is considered significant because these activities would result in disruptions, displacements, compaction, or overcovering of the soil and would increase water erosion of soils on the site.

Mitigation

- 1. Develop a slope map for the PTHP project site or have project maps on current USGS topographic map base.
- 2. Install waterbars on all exposed soil, heavy equipment trails, and roads no further apart than the Forest Practice Rules Moderate Erosion Hazard rating distance.
- 3. Restrict timber operations to those areas with low or moderate Erosion Hazard Ratings (EHRs) with slopes less than or equal to 50%. Prohibit timber operations on areas of high or extreme EHR or on slopes over 50%.
- 4. Require re-stocking in conformance with recommendations of the Registered Professional Forester (RPF) as contained in the PTHP.
- 5. Require that a minimum of existing organic matter be left on site to reduce energy of rainfall and lower potential erosion. Also, in areas of defensible landscape, lop and/or crush slash and leave it on the ground to further reduce the impact of rain on bare soil.
- 6. Lop all slash to less than 20 inches above ground, except in areas where higher standards apply (within 100 feet of residences).
- 7. Prohibit use of heavy equipment within any Watercourse and Lake Protection Zone (WLPZ) except at existing road crossings, thus protecting existing watercourses.
- 8. Allow only alternatives to WLPZ protection measures that increase the WLPZ width or restrictions within the zone. No decreased restrictions will be allowed.
- 9. Avoid heavy equipment use on saturated or near-saturated soils.
- 10. Restrict vegetation removal on landslide-prone areas.

- 11. Conduct mechanical treatments along contours on areas of moderate to high erosion hazard ratings.
- 12. New road construction shall be less than 100 feet in length, be on average slopes of less than 20%, involve no substantial cuts and/or fills, and may not occur in any Watercourse and Lake Protection Zone (WLPZ).
- 13. Allow only in-lieu winter operating plans that do not allow operations in WLPZ or on unstable ground.

Level of Significance Following Mitigation

With implementation of the recommended mitigation measures, impacts to geology and soils will be mitigated to a less than significant level.

4. HYDROLOGY AND WATER QUALITY

Changes in interception and infiltration rates with vegetation removal and the construction of tractor roads associated with the proposed project could contribute to existing flooding problems in Wooley Creek and along the Bear River. Use of heavy equipment, slash, and yarding could result in a possible decrease in water quality in the canals and reservoirs in the Plan area.

Vegetation management activities could result in possible short-term and longterm water quality degradation of streams. In addition to sedimentation impacts, use of heavy equipment presents the potential for accidental spills of pollutants such as gasoline, oil, and diesel fuel.

Mitigation

(See also Mitigation in Chapter 3, Geology and Soils)

1. Establish watercourse and lake protection buffer zones along perennial watercourses in which vegetation removal, fuel reduction, and ground disturbance are limited. The width of the buffer zone is dependent on the adjacent hillside slope and watercourse class as shown below:

Watercourse Class

Hillside Slope	Fish Bearing I	Non-Fish Bearing II	Intermittent III
0-30%	75 feet	50 feet	25 feet
30-50%	100 feet	75 feet	50 feet
50% >	150 feet	100 feet	50 feet

- 2. Prohibit heavy equipment from streamside buffer zones except at designated crossings.
- 3. Restrict new road construction to less than 100 feet in length with no construction within any watercourse buffer zone.
- 4. Prohibit clearcut harvesting.

Level of Significance Following Recommended Mitigation

With implementation of recommended mitigation measures, potential impacts to hydrology and water quality will be reduced to a less than significant level.

5. VISUAL RESOURCES

Implementation of the Meadow Vista Vegetation Management Project could result in a change in the visual character of the area through a reduction in the visual quality of the rural residential viewshed. The intent of the PTEIR is to maintain the existing forested condition of the Meadow Vista area while managing the vegetation for wildland fire protection.

Each one of these objectives means reducing the total amount of vegetation in the area, and spacing out remaining vegetation. Overall, the visual impact will be to keep the same basic forest types, only with a more open appearance.

Mitigation

- 1. Restrict allowable silvicultural harvest methods to only those that maintain at least a minimum amount of mature overstory trees.
- 2. Leave a variety of size class vegetation in shaded fuelbreak areas, while still providing an adequate disruption of fuel continuity for fuelbreak function.
- 3. Complete clean-up of slash and organic debris in defensible space and shaded fuelbreak areas. Clean-up shall be by chipping, removing, or burning. Chipping shall occur no later than 45 days after the creation of the slash and debris. Piling for burning shall occur no later than 60 days after the creation of the slash or debris, with burning no later than April 1 of the year following creation or one year from the date of creation, whichever comes first. Removal shall occur no latter than 60 days of the creation of the slash or debris. For clean-up purposes, shaded fuelbreaks shall be 100 feet either side of centerline of designated roads.

Level of Significance

Potential impacts to visual resources will be reduced by limited silvicultural practices proposed for fuel reduction purposes. Vegetative screening can be accomplished by selective removal of brush and understory to ensure privacy. Selective removal and replanting of native or other species to maintain a desired level of screening will reduce impacts to a less than significant level.

6. BIOLOGICAL RESOURCES

Individual Valley oaks could be removed to reduce fuel loading, as commercial hardwood, or indirectly as affected by soil disturbance and soil compaction. The extent of oak loss cannot be assessed at this time; however, future development in the Plan area could contribute incrementally to statewide loss of Valley Oaks in California. The loss of individual oaks could result in displacement or loss of wildlife species that depend on oaks for roosting, foraging, breeding, and movement corridors.

Although restricted activity is anticipated in riparian areas, limited vegetation trampling, streambank degradation, and disturbance to wildlife could occur.

The project could degrade wildlife habitat through fragmentation of continuous woodland and forest habitat, potentially disrupting linkages to other habitats, and lead to the direct and indirect loss or disturbance of special status plants and animals as well as native trees regulated under the Placer County Tree Preservation Ordinance.

The California Wildlife Habitat Relationships (CWHR) model was used to estimate overall impacts to wildlife. The model runs indicate that while some species will experience a reduction in habitat, others will benefit from the Vegetation Management Project. The model runs also indicate that overall urbanization has a more significant impact on wildlife than does removal of vegetation for fuel reduction purposes.

Mitigation

See also mitigation measures in Chapter 4 - Hydrology and Water Quality

- Each proposed PTHP shall have proposed operating areas inspected by a qualified RPF or other qualified professional for the potential presence of any listed, threatened, or endangered species of plant or animal. No impacts to any listed species will be allowed.
- 2. Adjust the timing of vegetation management activities to avoid impacts on listed wildlife species, including actively nesting birds.
- 3. Avoid mechanical clearing in rare natural communities, including areas with special status plants.

- 4. Clean all equipment off-site to limit the spread of invasive plant species.
- Encourage retention of Valley Oak areas within the community, and favor Valley Oak reproduction in those areas where it currently exists. Valley oak areas will be identified by individual landowners and retention will be encouraged.
- 6. Prohibit operations in any WLPZ except removal of dead/dying trees for public safety purposes and fire protection. All class I & II WLPZ watercourse corridors will otherwise remain intact.
- 7. Retain significant stand structure that will continue to be used for wildlife by restricting silvicultural harvest methods.

Level of Significance Following Recommended Mitigation

With implementation of recommended mitigation measures, potential impacts to biological resources will be reduced to a less than significant level.

7. CULTURAL RESOURCES

Implementation of the Vegetation Management Project could result in the possible disturbance of documented or undocumented cultural resources (archaeological or historical resources).

Mitigation

- 1. Project areas will be surveyed by a qualified RPF or other qualified professional for potential archaeological and historical resources prior to project implementation.
- 2. No timber operations may occur on significant archaeological sites.
- 3. If an archaeological or historical site is discovered during vegetation management operations, work will immediately stop within 100 feet of the site and the CDF Director shall be notified. The significance of the resources shall be determined and necessary protection measures taken. For significant cultural sites that cannot be avoided, site-specific mitigation measures must be approved by the CDF Director.

Level of Significance Following Mitigation

With implementation of proposed mitigation measures, potential impacts to cultural resources will be reduced to a less than significant level.

8. NOISE

The proposed project has the potential to generate short term noise from equipment used in the vegetative management process. This equipment includes chain saws, chippers, and other heavy equipment. Desirable outdoor levels of 60 dBA for residential uses and 45 dBA indoors could be exceeded during the course of vegetation management.

Mitigation

1. Restrict operation of chainsaws and other power-driven equipment to the hours between 7:00 a.m. and 9:00 p.m.. The operation of all other power equipment, except highway vehicles, within 200 feet of an occupied dwelling shall be restricted to the hours between 7:00 a.m. and 9:00 p.m., and shall be prohibited on Sundays and nationally designated legal holidays.

Level of Significance Following Mitigation

Implementation of the recommended mitigation measure would reduce potential noise impacts to a less than significant level.

9. AIR QUALITY

The major sources of air pollution are reactive organic gases (ROG) and oxides of nitrogen (NOx) emissions from heavy equipment exhaust and wind-blown dust from earth disturbance. In addition, disposal of wood/vegetative waste by open burning can create substantial emissions of PM¹0 (particulate matter 10 microns or less in size), CO (carbon monoxide), NOx, ROG, and other compounds. The PTEIR encourages projects to evaluate other vegetation disposal methods and use burning only where there is no other feasible alternative or if prohibiting burning would cause substantial financial hardship. Some non PTHP vegetation management projects will be coordinated with a chipper program coordinated by CDF. This provision will reduce potential smoke emissions.

Vegetation management activities would result in potentially increased pollutant emissions from limited open burning. This impact would be considered potentially significant if open burning was not regulated by the Placer County APCD to minimize harmful conditions and nuisance effects.

Mitigation

- 1. Burn only on designated burn-days stipulated by the Placer County Air Pollution Control District and with all necessary burn permits.
- 2. Reduce pre-burn fuel loadings by using other treatments.

- 3. Require material to dry before piling or allow sufficient time after piling for material to dry before burning. Piles that contain little soil and are constructed to allow air movement will result in a burn that consumes significantly more debris and produces less smoke. More efficient burning and greater heat output will lift smoke higher, reducing smoke concentration near the ground.
- 4. Use mass-ignition techniques that produce a short duration fire thereby increasing combustion efficiency and flow of smoke into the convection column.
- 5. Prevent stumps from burning and smoldering.

Level of Significance Following Mitigation

With burning restrictions contained within the PTEIR process, and with implementation of the recommended mitigation measures, impacts to air quality will be reduced to a less than significant level.

10. TRAFFIC AND CIRCULATION

The impact to traffic flow as a result of vegetation management activities is limited to heavy equipment entering and exiting the road shoulder during fuel reduction activities. During such time, through traffic can be disrupted by heavy equipment operation, leading to delays and potential safety concerns. This impact is considered potentially significant as most major roads in the Plan area will have shaded fuelbreaks along their margins with associated work within the public right-of-way.

Mitigation

- 1. Provide measures such as flagmen and directional traffic control as determined by the Placer County Public Works Department when heavy equipment ingress and egress is required in the public right-of-way.
- 2. Retain encroachment permits as needed for work in the Caltrans or County right-of-way.

Level of Significance Following Mitigation

Implementation of the proposed mitigation measures will reduce potential traffic impacts to a less than significant level.

11. FIRE PROTECTION

Successful implementation of the Meadow Vista Vegetation Management Project would lead to favorable impacts on wildfire management and fire fighting agencies. In the long run, the project would make it safer to fight fires around houses, would slow down the spread of fires between houses, and would lower overall fuel loads found in the forests of Meadow Vista.

Care must be taken, however, to reduce the threat of wildland fire by adequate clean-up following timber operations, including provisions for chipping, composting, or controlled burning of slash and debris.

The PTEIR program can only be effective if the public is informed of its benefits through an education program administered by fire agency personnel. The actual amount of increased demand cannot be determined because the levels of service will vary, depending on the commitment of fire service agencies.

Mitigation

- 1. Lop all logging slash to less than 20 inches above ground, except in those areas where current rules require other treatment (within 100 feet of residences).
- 2. Require clean up and disposal of debris on the ground within shaded fuelbreak projects to lower potential fire danger. Clean-up shall be by chipping, removing, or burning. Chipping shall occur no later than 45 days after the creation of the slash and debris. Piling for burning shall occur no later than 60 days after the creation of the slash or debris, with burning no later than April 1 of the year following creation or one year from the date of creation, whichever comes first. Removal shall occur no latter than 60 days of the creation of the slash or debris. For clean-up purposes, shaded fuelbreaks shall be 100 feet either side of centerline of designated roads.
- 3. Require clean up and disposal of all substantial size debris (greater than 1 inch) within defensible space harvests to lower potential fire danger.
- 4. Require rapid surface drying (spreading of material away from wet areas) for material left on the ground to prevent increase in insect brood material.

Level of Significance Following Mitigation

Implementation of the proposed mitigation measures will reduce potential fire protection impacts to a less than significant level.

12. ALTERNATIVES TO THE PROPOSED PROJECT

No Project Alternative

Under the no project alternative, the PTEIR process would not be used to facilitate the implementation of vegetation management projects, including those proposed under the Proposition 204 project. Individual landowners could continue to clear vegetation for defensible space and defensible landscape purposes with little or

no assistance or control from local or state agencies.

Burning of removed material would be permitted by the APCD on designated burn days. Shaded fuel breaks would be implemented by local and state agencies as well as private property owners on a voluntary basis and with funds as they become available. If commercial timber harvesting is proposed as part of the vegetation management process, then the existing timber harvest plan process on an individual basis would be pursued.

Existing regulations governing modified timber harvest plans could be used to implement some vegetation management objectives. The cost to individual landowners to use this process, however, will be higher than under the PTHP process due to Department of Fish and Game review fees and the need for detailed archaeological reports on all operating areas. The modified THP process has fewer environmental controls as a part of mandated conditions of approval and there are fewer constraints on logging debris disposal methods in most situations. The modified THP system would only partially achieve goals of the PTHP process while not incorporating the necessary mitigation measures contained in the PTEIR.

Vegetation management and fuel load reduction would continue to occur, but at a slower rate than with the PTEIR alternative. The benefits of the application of Forest Practice Rules and mitigation measures within the PTEIR would not be achieved with continued private application of fuel reduction measures. Impacts to soils, water quality, vegetation, wildlife, and air quality would be greater with the no project alternative. This could be especially true if the continued build-up of fuel load lead to a catastrophic wildfire in the community.

Fuel loads would gradually build up throughout the Meadow Vista Community as timber volumes and tree densities increase in the absence of harvesting and/or vegetation management. As a result, risks of damaging wildfires would increase relative to existing conditions. Because of the fuel management practices and standards specified in the PTEIR, the proposed project would not increase wildfire hazards relative to existing conditions and would reduce such hazards relative to the no project alternative.

Alternative 1 - PTEIR with Reduced Vegetation Management

Under this alternative, instead of reducing vegetative ground cover by 40-60%, vegetative cover would be kept at 60-85% ground cover, through the restriction on types of silvicultural practices allowed within any PTHP. Because there would be less vegetation manipulation, there would be less impacts to wildlife habitat, air quality, short-term noise and aesthetics.

Silvicultural practices from the Forest Practice Rules are defined in the *Introduction and Project Description*, including those to be applied in the various harvesting methods described in the Prefered PTEIR Alternative. Of the systems

defined, only clearcutting is prohibited under the Preferred PTEIR system. Under the PTEIR with Reduced Vegetation Management Requirements, only alternative prescriptions would be allowed with provisions similar to the Sanitation/Salvage system. Under Sanitation/Salvage, only those trees that are dead, dying, or that have severe structural problems are removed. The Forest Practice Rules alternative prescription would allow a limited number of green trees to be removed.

For projects undertaking a PTHP under the PTEIR with Reduced Vegetation Management Requirements process, less vegetation would be removed than with other silvicultural practices. This could result in less land disturbance, fewer impacts to wildlife, reduced visual impacts, and reduced potential for air quality impacts. As greater restrictions are placed on the PTEIR process, however, fewer property owners will choose this alternative and the potential effectiveness of mitigation measures in the PTEIR will be reduced.

In addition, reduced vegetation management practices inherent in this alternative would not meet the objective of the project, which is to reduce wildland fire hazards. In addition, this alternative would not meet many policy objectives of the Meadow Vista Community Plan to provide a fire safe community.

Environmentally Preferred Alternative

The proposed PTEIR project is the environmentally preferred alternative. The no project alternative would not provide the incentives for vegetation management that the PTEIR project would, nor would environmental protection measures be assured with continued private property owner pursuit of fuel load reduction outside of the PTEIR process.

Alternative 1 - PTEIR with Reduced Vegetation Management Requirements, would reduce several potential significant effects of the project but would not meet the overall objectives of the project to reduce wildfire hazards. This could result in greater potential for a catastrophic wildfire in the Meadow Vista community and the resulting significant impacts to water quality, biological, visual, cultural and air quality resources.